

## **Appendix F**

### **Movement Techniques**

The Paladin howitzer gains its increase in survivability by making frequent moves. To make the best use of this ability, soldiers in a Paladin platoon must be well trained in various movement techniques in different types of terrain.

#### **PLATOON MOVEMENT**

F-1. The POC controls three howitzer sections in a platoon position that is approximately 1,500 X 3,000 meters in area. Operating as a platoon of three sections requires a great deal of coordination between the section chiefs and the POC. C2 is maximized if a team leader is designated among howitzer sections. The senior chief or team leader directs the movement of the other sections based on guidance from the platoon leader, platoon sergeant or the POC. When the POC sends movement orders to the platoon, the team leader is responsible to execute the movement. Although all three howitzers in the platoon receive the same movement order, the team leader is responsible for leading the way to the new position.

#### **"WINGMEN" CONCEPT**

F-2. Two Paladin sections or "wingmen" maneuver by orienting off the team leader's location. The wingmen orient and disperse from the team leader as set forth by unit TSOP or as directed by the team leader. The team leader maneuvers and changes the platoon formation based on the factors of METT-TC. Orientation data may be designated by a direction; front, rear, left or right from the team leader, or in relation to the face of a clock. For instance, in desert terrain one wingman might be positioned 200 meters to the left and 300 meters to the rear, and the second wingman positioned 200 meters to the right and 300 meters to the rear of the team leader relative to the AOF (see Figure F-1). In more restrictive terrain, the distance might be 100 meters with one wingman at the 4 o'clock position and the second at the 8 o'clock position (see Figure F-2).

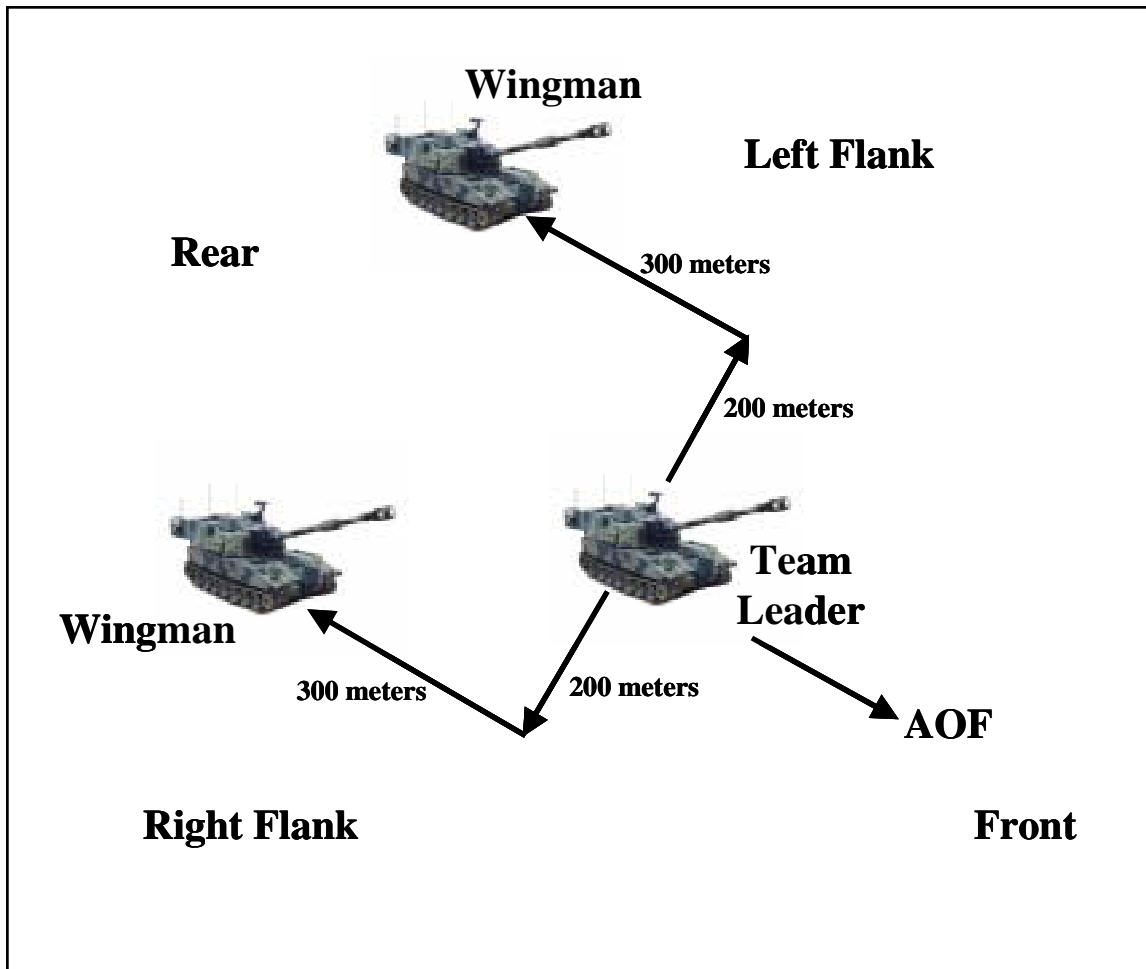


Figure F-1. Wingmen Positioned at Left and Right Rear

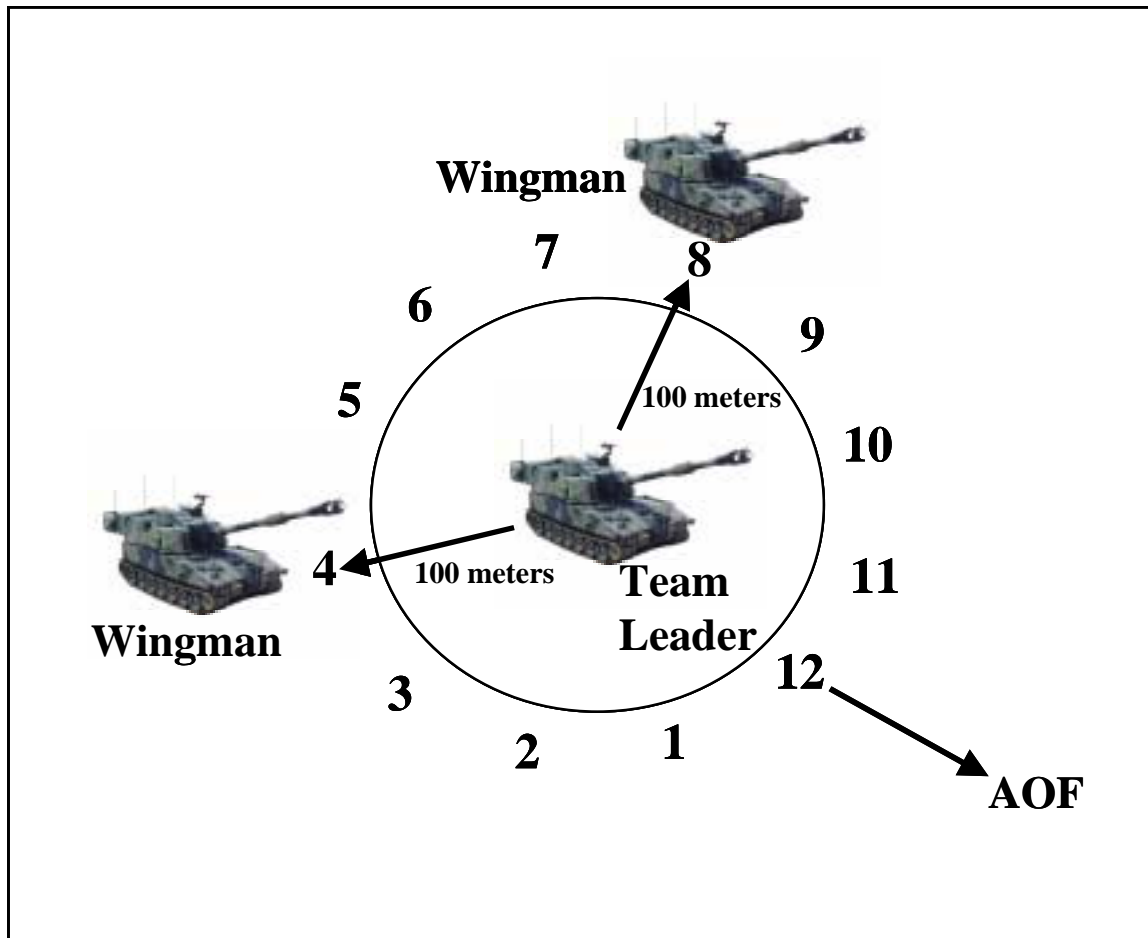


Figure F-2. Wingmen Positioned at 4 and 8 O'clock

## PAIRED MOVEMENT

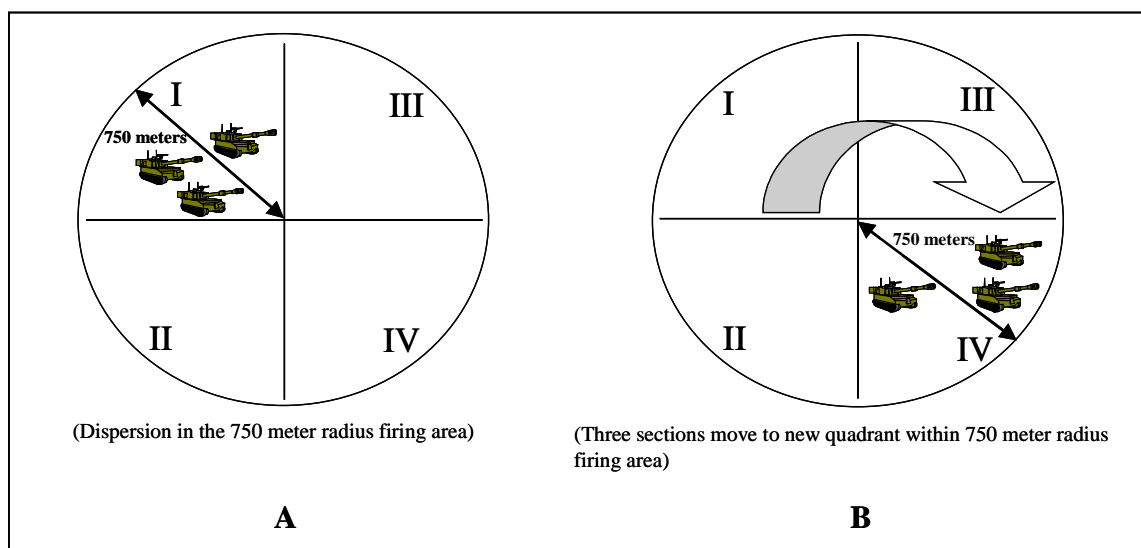
F-3. The battery commander may decide to move his battery in pairs of howitzers. With this technique, one POC assumes control of two pair and the other POC controls one pair. The paired concept is similar to the platoon movement except only two sections are moving together. As with platoon movement, it is advantageous to assign a team leader to control each pair. This concept simplifies the C2 and ensures that proper separation is maintained within a pair. As with platoon operations, both howitzers in the pair receive the same movement order and the team leader leads the way to the new position. The single wingman maneuvers and orients off the team leader's location as in platoon operations.

## MOVEMENT METHODS

F-4. The factors of METT-TC call for different types of movement techniques, tied to different levels of centralized versus decentralized control of the howitzers by the POC. The following techniques can be altered as the tactical situation and level of training within the unit dictate.

**DESERT/TUNDRA**

F-5. The unobstructed open spaces of a desert environment offer the easiest methods of conducting survivability movement. Any method can be used in conjunction with decentralized control to maximize dispersion and use of the terrain. The team leader, followed by his wingmen, can disperse in the firing area (Figure F-3A), they can move from firing area to firing area as in the quadrant method (Figure F-3B), or they can displace to a new firing area within the PA. The movement should be varied so actions do not become predictable.



**Figure F-3. Survivability Movement**

**TEMPERATE/FORESTED**

F-6. The temperate/lightly forested environment, such as is found in most of Western Europe and much of the United States, calls for an intermediate level of centralization. As terrain features may subdivide platoon areas, the senior COS can find locations for his wingmen within his area, based on guidance from the GSG or platoon sergeant. The wingmen concept can be used here also, but since the COS will want to use all available cover and concealment, the orientation may have to be more flexible. For example, guidance from the team leader to his wingmen might be: "Follow me to the next tree line, and take a positions 200 meters left and right of me in the tree line."

**URBAN**

F-7. The urban environment calls for the most centralized control of any environment. Since maneuverability may be limited, the GSG should reconnoiter individual howitzer positions, and brief his chiefs on where they are. As time permits, the GSG can take the chiefs to each of their firing positions in the PA in the GSG's HMMWV. The GSG should report to the

POC and point out on the PA diagram where all of the individual howitzer positions are located.

## MOVEMENT TO CONTACT

F-8. In a fast moving situation such as a movement to contact, movement may not fit neatly into the categories of "tactical" or "survivability" moves. Units should establish TSOPs for how to deploy in these situations. Those TSOPs should allow for swift emplacement from the column march. The wingmen concept can be useful here also.

## MOVEMENT TTP

F-9. This section provides a short description of movement options and associated TTPs. The list of options is not all-inclusive. FM 71-123, *Tactics and Techniques for Combined Arms Heavy Forces: Armored Brigade, Battalion/Task Force, and Company/Team*, Appendix A; FM 17-98-1, *Scout Leader's Handbook*; and FM 17-15, *Tank Platoon* provide additional assistance and reference for movement and survivability in combat. They also discuss TTPs for navigation, TLPs, and C2 during movement.

F-10. When selecting movement options leaders must consider METT-TC:

- Mission. What are the battalion, battery, and platoon missions? What is the task force commander's intent? What are the essential tasks for this mission?
- Enemy. Where is the enemy and what size force does he have? What are his intentions? Will he attack, defend, or delay? What are his strengths and weaknesses?
- Terrain and Weather. Where can we observe and fire at the enemy? Where are covered and concealed routes and positions? Where are the obstacles and what kind are they? How are they bypassed? Where is the key terrain, and how can it be used to support the mission? Where are the avenues of approach? How fast can we move, and how much space does terrain and other unit formations give us?
- Troops (and other assets). What are the conditions of personnel and vehicles? What is the status of ammunition, fuel, and supplies? How much sleep can we get? Who is best able to do a specific task? What other assets are available to support our mission? What are other batteries and platoons doing?
- Time Available. What was the SP time? What was the line of departure time? How much time is available for planning, preparation, and movement?
- Civil considerations. Are there any restrictions or hindrances to movement?

F-11. In addition to the factors of METT-TC, the movement options selected must take the following into account:

- The battalion displacement options (the organization and sequencing of moves) discussed in FM 6-20-1:
  - By unit- the battalion displaces with all elements moving at once.

- By echelon- the battalion displaces in 2-3 groupings.
- By battery- each firing battery moves only after the preceding battery has completed its move and is in place.
- By element- the battalion displaces by individual elements as recommended by the battery commanders.
- In some cases, battalion may influence movement to maintain control of fires especially for employment of special munitions or mass missions.
- Maintaining the communications flow (electronic line of sight) from battalion TOC/FDC to the platoons to the guns. Extended ranges between battalion and platoons may require the use of battalion retransmission capability.
- Need to maintain survey/navigation accuracy on board the howitzer.
- Survivability/Defensibility

## FORMATIONS

F-12. The unit can use, but is not restricted to four basic formations: column, wedge, box, and line. Leaders should select the formations most appropriate for the situation unless directed otherwise. Formations are not rigid. Terrain and common sense will frequently dictate needed changes. There is no set location for leaders. Key personnel must be tactically positioned in locations to best provide C2. Typically, the GSG is positioned forward to reconnoiter and provide early warning to the unit. The position of vehicles and support elements are dictated by METT-TC.

F-13. Consider the following formations (see Figure F-4 through F-7) as a general guide:

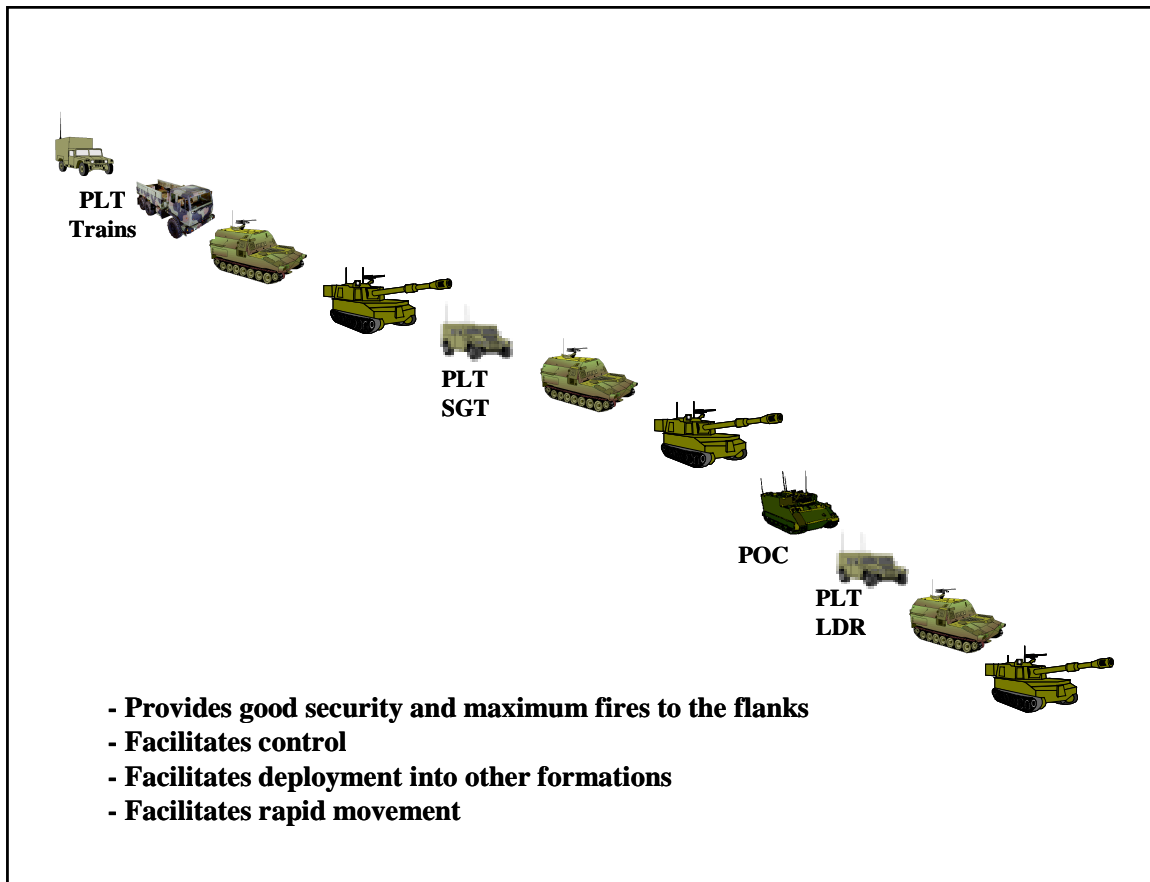
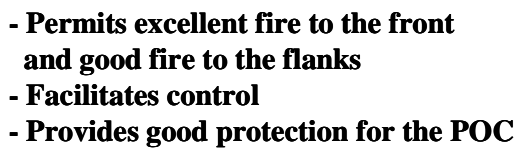


Figure F-4. Column



### Figure F-5. Wedge



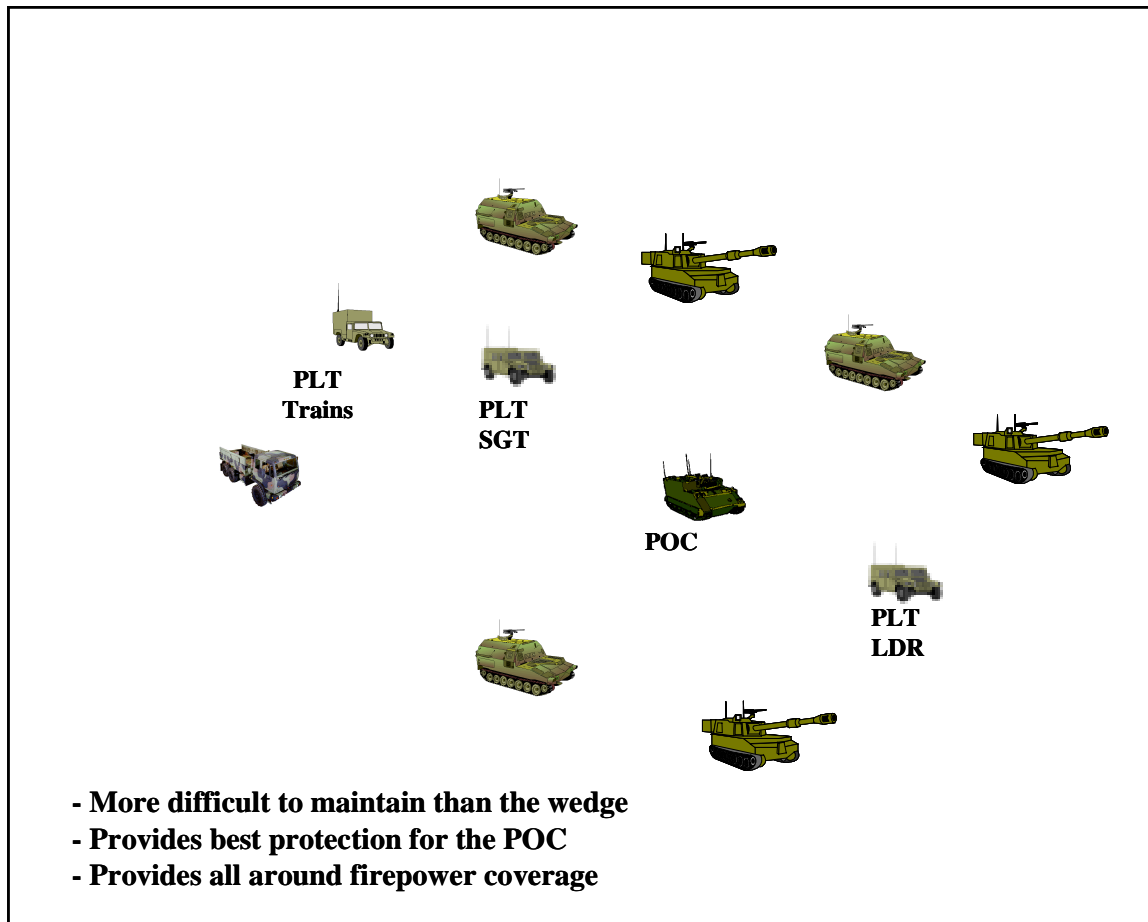


Figure F-6. Box

- Permits maximum firepower to the front
- Is the most difficult to control
- Is less secure due to lack of depth

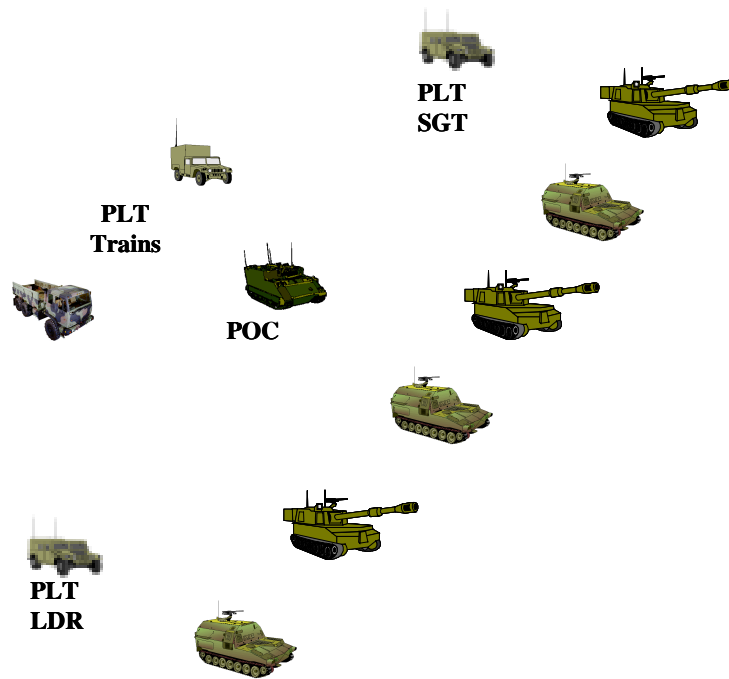


Figure F-7. Line